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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,997	09/02/2003	Minoru Sakairi	503.39081VX1	1421

20457 7590 03/01/2004

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EXAMINER

KALIVODA, CHRISTOPHER M

ART UNIT PAPER NUMBER

2881

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/651,997	Applicant(s) SAKAIRI ET AL.	
	Examiner Christopher M. Kalivoda	Art Unit 2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 1 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/02/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/02/2003</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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### ***Claim Objections***

Claim 1 is objected to because of the following informalities: There is a spelling error on the last line. "Hydrocarbin" should be "hydrocarbon". Also, the word "a" in the last line is believed to be "and". The word "chlorophenol" appears both in lines 8 and 9. Appropriate correction is required.

Claim 7 is objected to because of the following informalities: There is a typographical error in line 2 beginning after the word "samples" which makes the claim read awkwardly. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claim 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. In addition, these claims contain both method and apparatus in the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al. U.S. Patent 6,189,461. Regarding independent claims 3 and 4, Miyazawa et al teach a monitoring system comprising:

an exhaust passage for discharging gas of combustion (Fig 4, ref sign 23 is the gas of combustion);

a sampling pipe for collecting said gas in a part of said exhaust passage (col 7, lines 37 and 38);

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a filter for removing unnecessary components of the gas from the sampling pipe (Fig 4, ref sign 22); and

a mass spectrometer for introducing the gas passed through the filter to a downstream side and for analyzing the gas and monitoring generated dioxins on the basis of the analysis (col 7, lines 33-43 and col 8, lines 11-13) and for controlling operation on the basis of the analysis from the mass spectrometric portion (col 13, lines 50-58). While the reference does not specifically mention a sampling pipe, there is a second unit for measuring the exhaust gas and a pipe implied to transfer the gas to the mass spectrometer. Furthermore, the second CA measuring device (for measuring chlorinated aromatic compounds which includes dioxins) is constructed similar to the first CA measuring device.

Claims 3 and 4 are also rejected under 35 U.S.C. 103(a) as being unpatentable over Sakairi, Japanese Application 11-304769. Regarding independent claims 3 and 4, Sakairi teaches a monitoring system comprising:

an exhaust passage for discharging gas of combustion (para 001, line 1-5);

a sampling pipe for collecting said gas in a part of said exhaust passage (para 0022, lines 5-7 and Fig 2, ref sign 8);

a filter for removing unnecessary components of the gas from the sampling pipe (para 0024, last line and Fig 2, ref sign 6); and

a mass spectrometer for introducing the gas passed through the filter to a downstream side and for analyzing the gas and monitoring generated dioxins on the

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basis of the analysis (para 0028, lines 3-6) and for controlling operation on the basis of the analysis from the mass spectrometric portion. While the text does not specifically teach controlling based on the analysis results, the invention certainly implies control since dioxin is a deadly poison generated from incineration processes (para 0001, line 2).

### ***Double Patenting***

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 5-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,686,593.

Regarding claims 5-7, Sakairi et al. teaches a detector comprising:

a probe for sampling a sample gas;

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a first chamber for introducing said sample from said probe;

a needle electrode is arranged within said first chamber;

a first opening portion for introducing ions generated in said first chamber into a mass spectrometric portion;

and a second opening portion for supplying said sample gas, said second opening being located so that an angle formed by a direction connecting said first opening portion and a tip end of said needle electrode, and a direction connecting a center of said second opening portion and said tip end of said needle electrode is less than or equal to 90.degree;

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a display for displaying a result of a judgment mass by a mass spectrometric portion. While the claim does not specifically mention a display, a display is typically used to result the output of the mass spectrometer.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Kalivoda whose telephone number is (571) 272-2476. The examiner can normally be reached on Monday - Friday (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk

*Nikita Wells* 02/11/04  
**NIKITA WELLS**  
**PRIMARY EXAMINER**